TRADOC Futures Center

Object Based Publishing



Mr. Jim Bradley

Object Based Publications

Agenda



Problems

Object Based Publications

Parsing Tools

Way Forwar

Problems

- **Current technology has surpassed current methods for timely dissemination of doctrine to the Soldier.**
- **Current doctrinal format/storage (book/manual/CD/web-based) and search methods make it difficult for Soldiers to pinpoint needed information in a efficient and effective manner.**

Solution

Object Based Publishing (OBP) - Doctrine published as concise, stand alone topics (objects).

The Goal:

Data arranged in an architecture that allows for timely retrieval (tools/search agents) to serve the requirements of the warfighter

- ***Right information at the right time***
- ***Data positioned to support knowledge management***
- ***Data part of the DoD knowledge backbone***
- ***New process to support doctrine development***

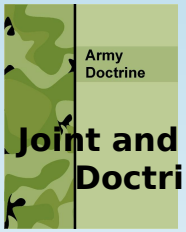
Potential Advantages Of OBP

- **More tailored and concise for warfighter retrieval.**
- **Postures doctrinal materials to keep pace with technology.**
- **Easy to rapidly combine different types of tactical information as needed**
- **Allows for rapid update of information and dissemination of that information.**

Web Based Publications

Object Based Publicati

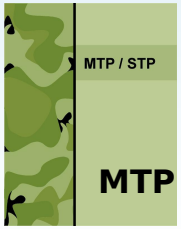
Current Format of Publication



Joint and Army Doctrine

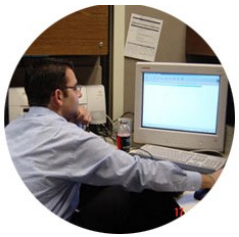


Lessons Learned



MTP / STP

Break into Chunks



and apply Taxonomy

Doctrinal Objects Stored in a Repository









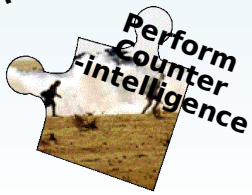












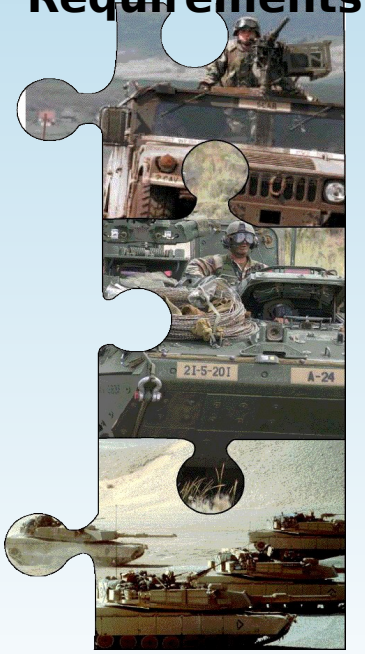


Soldier Query



Tailored Response

Information that Fits the Warfighters' Requirements



Object excerpt

Offensive action is the decisive form of battle. The primary purpose of the offense is to defeat, destroy, or neutralize an enemy force. A commander may also take offensive actions to deceive or divert the enemy, deprive him of resources or decisive terrain, develop intelligence, or hold an enemy in position. Even in the defense, offensive action is normally required to destroy an attacker and exploit success. The key to a successful offensive

Technical Foundation for OBP

- **xml**
- **Metadata**
- **Web Centric vs. Database Centric**
- **Taxonomy and Ontology**

What is XML?

- XML is the Extensible Markup Language. It is designed to improve functionality of the Web by providing more flexible and adaptable information identification.
- It is called extensible because it is not a fixed format like HTML (a single, predefined markup language).
- XML is actually a `metalanguage' --which lets you design your own customized metatags for limitless different types of documents.
- Metadata(tags) are data about data.

Web Centric vs. Database Centric

- **XML Metatags allow for the power of database indexing and organization without the limitations of a database architecture.**

- **Allows for a file repository of information that is web enabled.**

What is a Taxonomy?

- **A taxonomy is the hierarchical classification for information.**
- **Taxonomies are used in editing, archiving, publishing, and information retrieval processes.**

Ontologies provide a vocabulary for representing and communicating knowledge about some topic and a set of relationships that hold among the terms in that vocabulary.

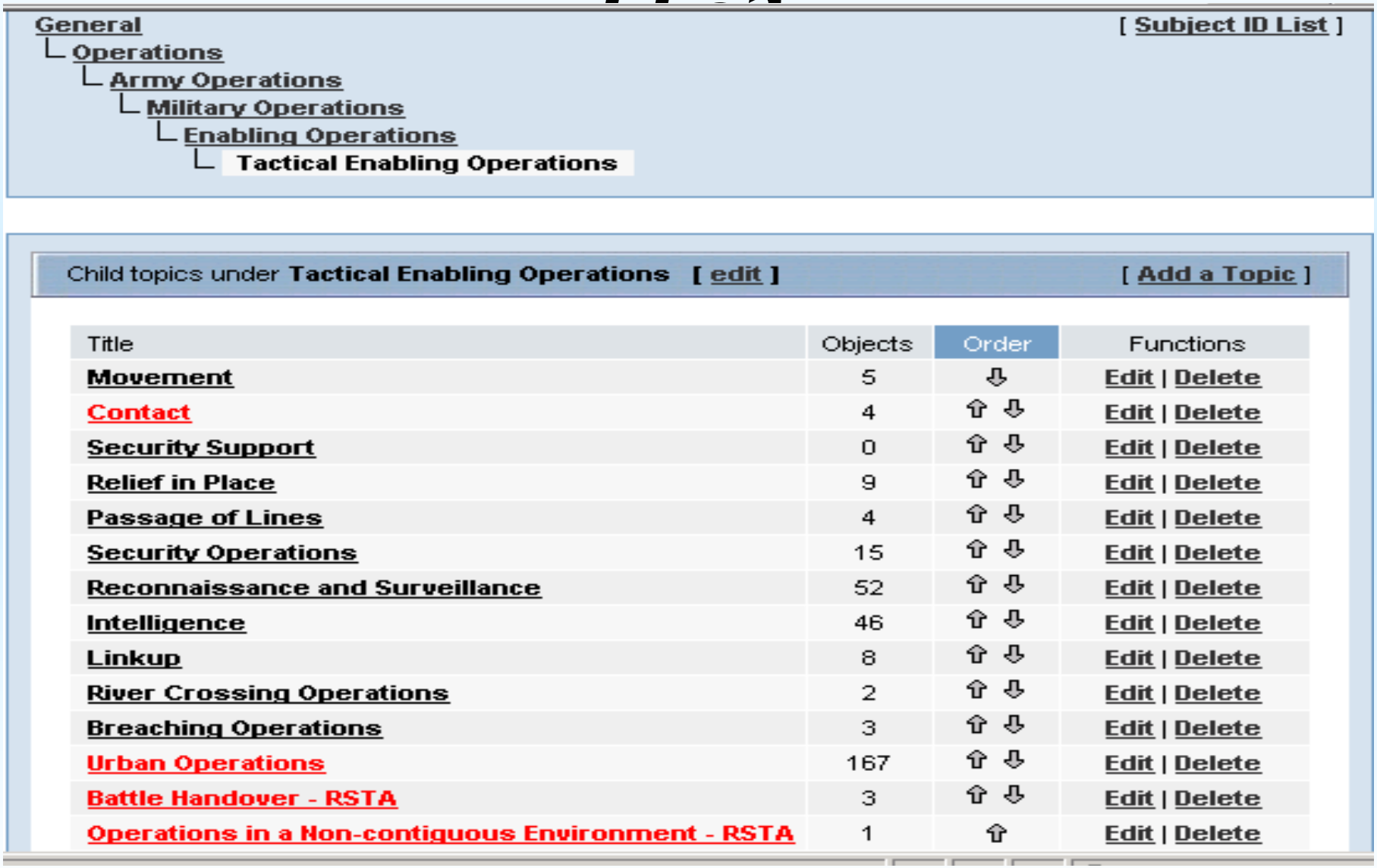
Taxonomy Advantages

- **The taxonomy is a reference for sharing data with sister services, allies and other governmental agencies.**

- **Doctrine, tagged logically, will better assist warfighters in finding needed information.**

- **Taxonomies help avoid common English language problems such as words with multiple meanings (fish tank vs. Abrams tank).**

What does our taxonomy look like?



General
└ Operations
└ Army Operations
└ Military Operations
└ Enabling Operations
└ Tactical Enabling Operations

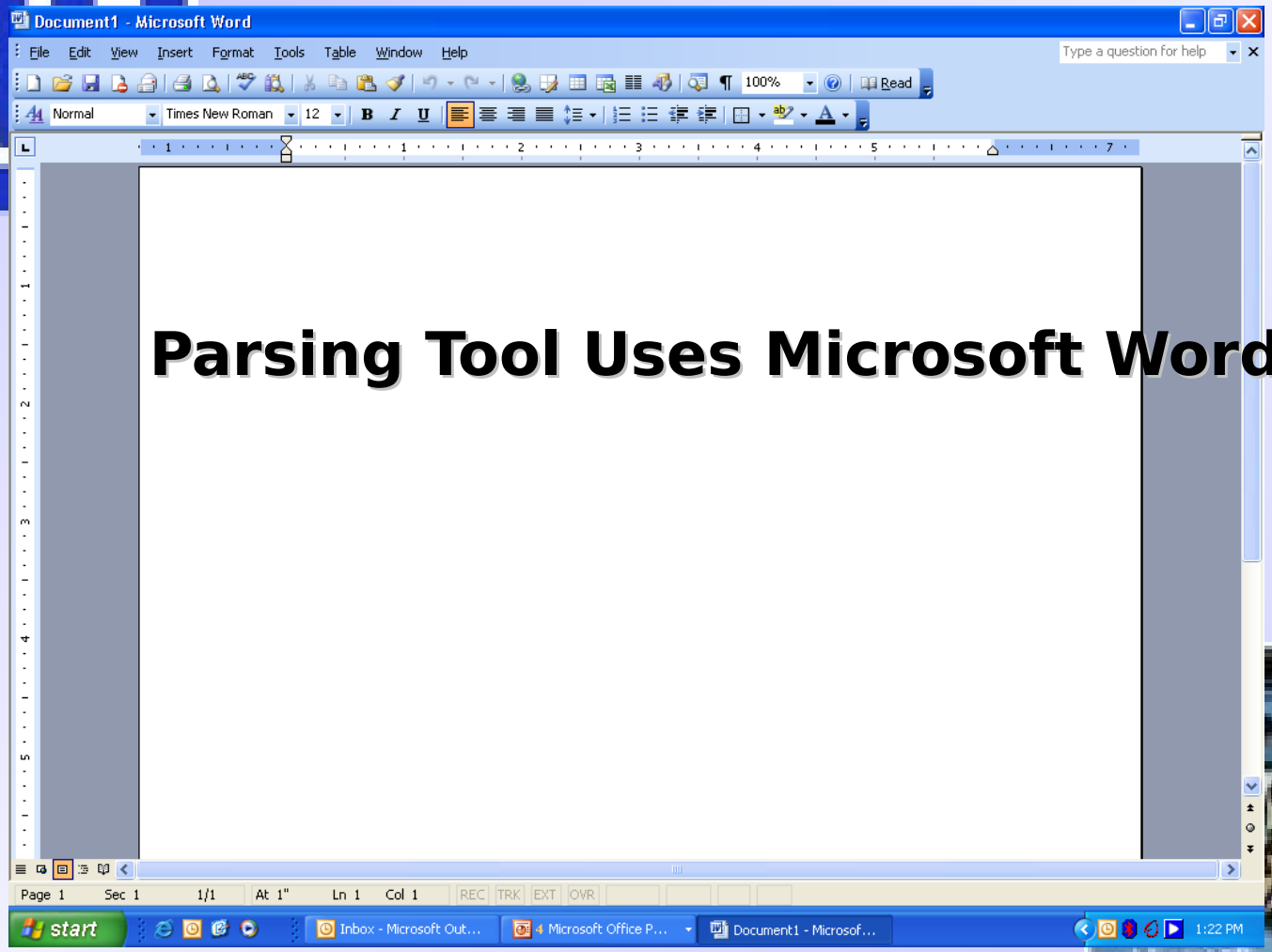
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Relief in Place	9	⇧ ⇩	Edit | Delete
Passage of Lines	4	⇧ ⇩	Edit | Delete
Security Operations	15	⇧ ⇩	Edit | Delete
Reconnaissance and Surveillance	52	⇧ ⇩	Edit | Delete
Intelligence	46	⇧ ⇩	Edit | Delete
Linkup	8	⇧ ⇩	Edit | Delete
River Crossing Operations	2	⇧ ⇩	Edit | Delete
Breaching Operations	3	⇧ ⇩	Edit | Delete
Urban Operations	167	⇧ ⇩	Edit | Delete
Battle Handover - RSTA	3	⇧ ⇩	Edit | Delete
Operations in a Non-contiguous Environment - RSTA	1	⇧	Edit | Delete

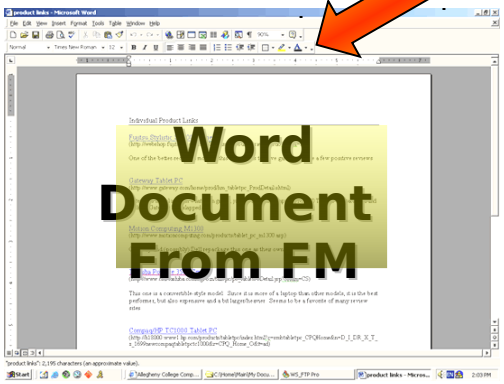
What Does it Mean to Me?

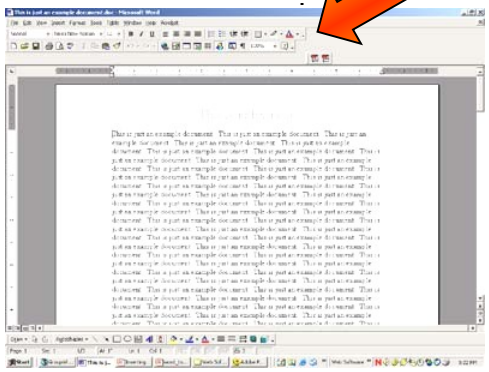
Now What do I Have to Do!?

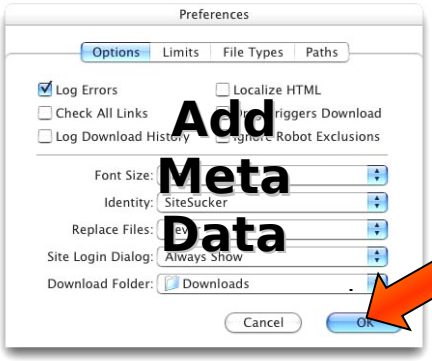

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Read
Normal
Times New Roman
12
Parsing Tool Uses Microsoft Word
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start
Inbox - Microsoft Out...
4 Microsoft Office P...
Document1 - Microsof...
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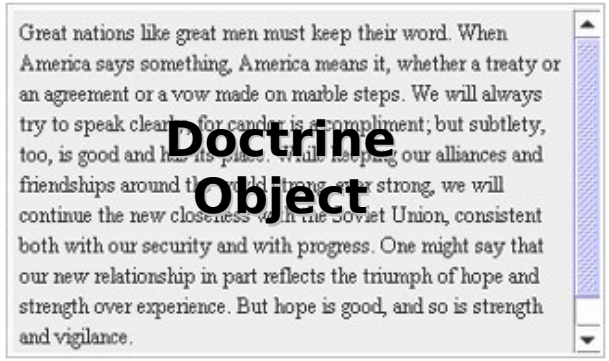

Word

How it Works


Word
Document
From FM




Preferences
Options
Limits
File Types
Paths
Log Errors
Localize HTML
Check All Links
Log Download History
Font Size:
Identity:
SiteSucker
Replace Files:
Site Login Dialog:
Always Show
Download Folder:
Downloads
Cancel
OK
Add
Meta
Data


Great nations like great men must keep their word. When America says something, America means it, whether a treaty or an agreement or a vow made on marble steps. We will always try to speak clearly, for candor is a compliment; but subtlety, too, is good and has its place. While keeping our alliances and friendships around the world strong, even strong, we will continue the new closeness with the Soviet Union, consistent both with our security and with progress. One might say that our new relationship in part reflects the triumph of hope and strength over experience. But hope is good, and so is strength and vigilance.
Doctrine
Object

A Page from FM 3-21.31

Section I. CSS PLANNING CONSIDERATIONS

The SBCT commander, through his executive officer, S1, S4, and brigade surgeon, makes plans and key decisions concerning CSS. As the senior CSS commander, the BSB commander serves as the primary CSS operator for support to the SBCT. His staff manages most CSS operations through an array of digital information systems. Because of the SBCT's austere CSS system, the BSB support operations section has the capability to integrate CSS activities from outside the SBCT. The rear command post is the focal point of these activities.

11-1. GENERAL GUIDELINES

In SBCT units, health service support assets are assigned to maneuver units. The infantry battalions and cavalry squadron (RSTA) each have a medical platoon. The field artillery battalion, antitank, and engineer companies each have a medical section. In addition, the BSB provides each infantry battalion, cavalry squadron (RSTA), and field artillery battalion with a combat repair team (CRT) to provide maintenance and repair parts support to all units operating in that battalion's area. The BSB retains control over supply and transportation assets to provide area support for other key logistics functions such as rations; petroleum, oils, and lubricants (POL); and munitions. Respective staff sections, such as S1 and the unit ministry team, support other CSS functions (personnel, legal, and religious, for example).

a. Within this support structure, the SBCT must plan, prepare, and execute its CSS plan. Concurrent with the operational planning of the main CP, the rear CP develops the CSS plan during mission analysis and refines it in the war gaming portion of the decision-making process. CSS rehearsals are normally conducted to ensure a smooth, continuous flow of materiel and services.

b. The SBCT's basic CSS responsibilities are to execute CSS with its BSB and medical units, to report and request all other support requirements through the correct ARFOR channels, and to ensure that CSS operations are properly executed when support elements arrive in the SBCT area. The rear CP is normally in charge of these functions, with guidance and oversight provided by the SBCT commander.

11-2. SBCT RESPONSIBILITIES

The rear CP controls and coordinates CSS for the SBCT. This includes ensuring that supplies and services for sustainment are provided by higher, joint, multinational, host nation, or contract sources. The primary CSS functions required by the SBCT include casualty treatment and evacuation, resupply operations, maintenance activities, and personnel service support. The SBCT S1 and S4 sections collocate with the BSB CP to form the rear CP in the SBCT support area. The following personnel have the primary responsibility for CSS.

a. **SBCT Commander**. The commander ensures that CSS operations sustain his SBCT's fighting potential. He provides the following guidance for CSS personnel:

•CSS priorities in terms of maintenance, transportation, supply, health service support, field services, explosive ordnance disposal, human resources support, financial management operations, religious support, legal support, and band support.

Section I. CSS PLANNING CONSIDERATIONS

The SBCT commander, through his executive officer, S1, S4, and brigade surgeon, makes plans and key decisions concerning CSS. As the senior CSS commander, the BSB commander serves as the primary CSS operator for support to the SBCT. His staff manages most CSS operations through an array of digital information systems. Because of the SBCT's austere CSS system, the BSB support operations section has the capability to integrate CSS activities from outside the SBCT. The rear command post is the focal point of these activities.

Object Based Publications

Tagging a Chunk – Behind the Scene


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Behind the Scenes Tags

Achieved by Dropdown on Last Chart

Object Based Publications

Tagging a Chunk (Cont)

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</para>
<para>
<text>**The Stryker brigade combat team (SBCT) commander, thru his executive officer, adjutant (S1) and logistics officer (S4), and brigade surgeon makes plans and key decisions concerning combat service support (CSS). As the senior CSS commander, the BSB commander serves as the primary CSS operator for support to the SBCT. His staff manages most CSS operations through an array of digital information systems. Because of the SBCT's austere CSS system, the brigade support battalion (BSB) support operations section has the capability to integrate CSS activities from outside the SBCT. The rear command post is the focal point of these**

Object Based Publications

First Year Object Based Publications Team

Akima and Alion Team

- **Process Engineers**
- **Software Developers**
- **Training Developers**
- **Doctrine SMEs**



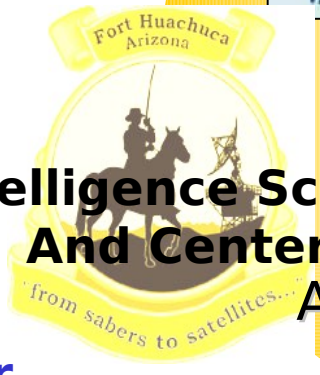


Contract Executive

Joint and Allied Doctrine Directorate



Combined Army Doctrine Directorate Fort Leavenworth



Intelligence School And Center



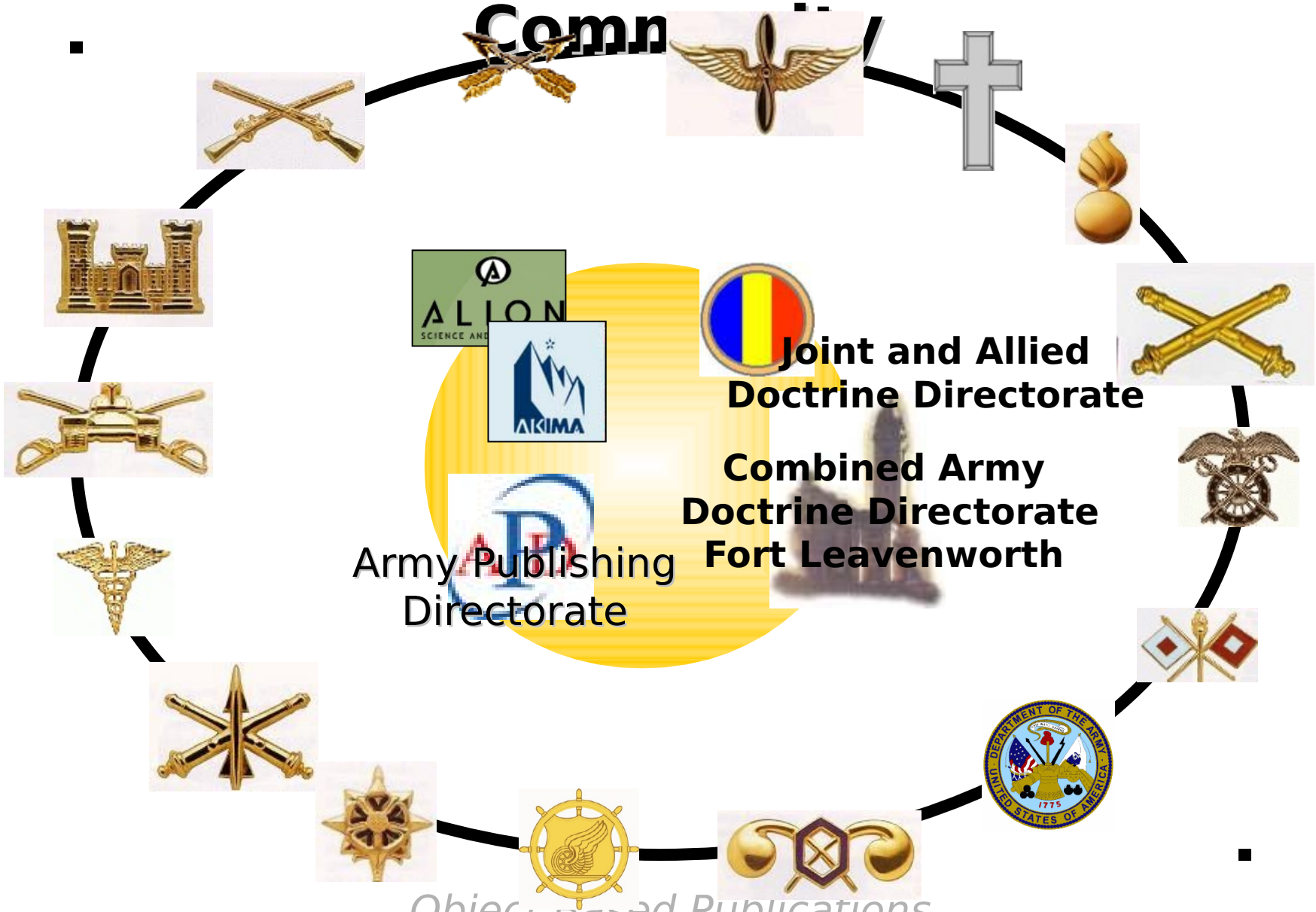
Army Publishing Directorate

Focus for Candidate Publications

Taxonomy And Meta-data

Process Owner

Doctrine Development Comm



Object Based Publications

Conversion for Object Based Publications

- **Contract Objectives:**
  - **“Chunk” and Store xml Objects**
  - **Update and Refine Taxonomy**
  - **Review Business Rules**
  - **Analyze Processes to Support OBP**
- **Deliverables:**
  - **Populated Doctrine Repository**
  - **Parsing Tools**
  - **Guide for “Chunking” Doctrine**
  - **Retrieval Tools**

Where We Are

- **Web Portal and Temporary Repository Established**
- **Parsing Tools**
- **Continuing to Hire Personnel**

The Way Forward

- **Parsing Effort Underway**
- **Training Modules/Methods in Development**
- **Updated and Improved Taxonomy**

Summary

Goal of Object Based Publications

Develop a plan to improve Soldier's access to doctrine and streamline doctrine development and responsiveness through technology.



Object Based Publications